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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/822,143

04/12/2004

Dae-woo Cho

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EXAMINER

MYERS, PAUL R

ART UNIT

PAPER NUMBER

2112

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/822,143 | <b>Applicant(s)</b><br>CHO, DAE-WOO |  |
|                              | <b>Examiner</b><br>Paul R. Myers     | <b>Art Unit</b><br>2112             |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/10/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6, 10-13, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lien et al PN 5,386,567 in view of Clark PN 5,448,045.

In regards to claims 1, 10, 17-18: Lien et al teaches a computer system (1 and 2) having a display device (Screen on figure 1), an input device (Keyboard or camera), a storage medium (5), a processor (4), an operating system (OS), and a local bus (7 and 8) capable of performing data transmission with the processor for a predetermined timing, the computer system comprising: at least one extension slot (9 and 10), provided in the computer system, operable to connect with the local bus (7,8); and at least one interface card (2), detachably mounted in the extension slot, operable to load built-in driver programs (S8) and environmental setting values (S7) to the operating system (OS). Lien et al teaches the programs are loaded when the adapter card is inserted as opposed to when the computer system is booted. Clark teaches (Column 9 lines 26-36 and Figure 8) when a system is booted in a state that an expansion card connects to an expansion slot the expansion BIOS is loaded from the expansion card. It would have been obvious to a person of ordinary skill in the art at the time of the invention to also load the adapter control software from the adapter when the system is booted as well as when the card is inserted

Art Unit: 2112

because this would have prevented a need to remove the adapted and reinsert it each time the system is rebooted.

In regards to claim 2: Lien et al teaches the interface card including an interface module (the pins 14-16) connectable with the local bus (via electrical connector 9); and a memory device (13) operable to store the driver programs when said driver programs make the interface module recognized to the operating system and the environmental setting values.

In regards to claims 3, 6 and 11-13: Lien teaches the driver programs and environmental settings being stored in the memory on the adapter. Lien does not expressly teach the memory being partitioned. Official notice is taken that memory partitions are common. It would have been obvious to partition the memory because this would have allowed for an organized memory management.

In regards to claim 4: Lien teaches the device driver being loaded by a resource manager. It would have been obvious to a person of ordinary skill in the art to include the resource manager as part of the operating system. See MPEP 2144.04 V B.

3. Claims 5, 7, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lien et al PN 5,386,567 in view of Clark PN 5,448,045 as applied to claim 3 above, and further in view of Sherer et al PN 5,459,854.

In regards to claims 5, 14-16: Lien et al teaches loading the device driver to the operating system as described above. Lien et al is silent upon the device driver being the correct device driver for the operating system. Sherer teaches loading software based upon the architecture of the system including operating system. It would have been obvious to load the correct device

Art Unit: 2112

driver for the operating system because this would have allowed Lien's system to function properly.

In regards to claim 7: Lien et al teaches loading the device driver to the operating system as described above. Lien et al is silent upon which operating system is used. Sherer teaches UNIX and DOS operating systems.

4. Claims 8-9, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lien et al PN 5,386,567 in view of Clark PN 5,448,045 and Sherer et al PN 5,459,854 as applied to claim 7 above, and further in view of Hitz et al PN 5,485,579.

In regards to claims 8 and 19: Lien et al does not teach a virtual file system. Hitz et al teaches a with multiple operating systems in which a virtual file system is used to allow for different operating systems. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a virtual file system because this would have allowed for ease in dealing with multiple different operating systems.

In regards to claims 9 and 20: Hitz teaches a tree structure.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

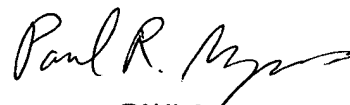
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul R. Myers whose telephone number is 571 272 3639. The examiner can normally be reached on Mon-Thur 6:30-4:00.

Art Unit: 2112

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRM  
March 2, 2006

  
PAUL R. MYERS  
PRIMARY EXAMINER